Docket No.: P2267/PA1021 ***PATENT***

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Richard D. Cappels et al.	: Confirmation No.:	6429
Serial No.:	09/160,503	: Art Unit:	2179
Filed:	9/24/1998	: Examiner:	Mylinh T. Tran
For:	APPARATUS AND METHOD FOR HANDLING SPECIAL WINDOWS IN A DISPLAY	:	

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APPEAL BRIEF

Sir/Madam:

The following Appeal Brief is submitted pursuant to the Notice of Appeal filed March 30, 2007 in the above-identified Application, and within two months of the Decision on Petition, dated June 28, 2007, in the above-identified Application.

I hereby certify that this document is being electronically transmitted to the U.S. Patent and Trademark Office via EFS from the Pacific Time zone on August 28, 2007.

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(1) Real party in interest

The real party in interest is Apple Inc., having its principal place of business in Cupertino, California.

*(2) **Related appeals and interferences***

To the present knowledge of the Appellant's representative, there are no related appeal or interference cases in the present application, or other related appeals or interference proceedings that will directly affect, or be directly affected by or have a bearing on, the Board's decision in the present Appeal.

In related patent application 08/900,964 entitled "System And Method For Generating High-Luminance Windows On A Computer Display Device", the BPOAI issued a Decision on Appeal on April 15, 2003 in Appeal # 2002-1304. On September 7, 2004, Appellant filed a 2nd Notice of Appeal in related patent application 08/900,964.

(3) Status of claims

Claims 1-51 are pending in the present application, claims 13-20 and 33-40 having been withdrawn from consideration.

Claims 1-12, 21-32, and 41-51 stand under final rejection, from which rejection this Appeal is taken.

(4) Status of amendments

No amendments have been filed subsequent to the final rejection of April 25, 2006.

(5) Summary of claimed subject matter

The following concise explanation of the invention by numbering and insertion of reference pages (p.) and line numbers (l) is intended to be exemplary and not limiting.

1. An apparatus [100] for generating an image [FIG. 2] on a display [112], wherein said image [FIG. 2] includes one or more special windows [200], comprising (p. 10, l. 20 – p. 11, l. 9; p. 11, l. 16–20; p. 14, l. 12):

a window manager [314] to embed special window information [in 514 & 516] in a video signal [418] comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including said special window information [in 514 & 516], wherein said video signal [418] characterizes said image [FIG. 2] to be generated on said display [112] and said first and second color signals [616, 618] are used to display said special window information [in 514 & 516] on said display [112] (p. 12, l. 17–18; p. 18, l. 19–23; p. 19, l. 16–18; p. 13, l. 15; p. 17, l. 9–11; p. 17, l. 18–19; p. 11, l. 16–20; p. 10, l. 23; p. 25, l. 1–16); and

a window decoder [416] to extract said special window information [in 514 & 516] from said video signal [418] and responsively generate a display control signal [420], wherein said display control signal [420] enables special processing of portions of said video signal [418] associated with said one or more special windows [200], and wherein said special processing results in said one or more special windows [200] being produced on said display [112] with one or more display attributes that differ from non-processed portions of said video signal [418] (p. 13, l. 15; p. 19, l. 16–18; p. 13, l. 15; p. 13, l. 17–19; p. 14, l. 12; p. 13, l. 17 – p. 14, l. 10).

2. The apparatus [100] of claim 1, wherein said window manager [314] is included in an operating system [312] (p. 10, l. 20 – p. 11, l. 9; p. 12, l. 17–18).

3. The apparatus [100] of claim 1, wherein said window decoder [416] is implemented as an application-specific integrated circuit (p. 10, l. 20 – p. 11, l. 9; p. 13, l. 15; p. 23, l. 6–7).

4. The apparatus [100] of claim 1, further comprising (p. 10, l. 20 – p. 11, l. 9):

a target area [512] in said special windows [200] to be specially processed in response to said display control signal [420], wherein said special processing results in said target area [512] being produced on said display [112] with one or more display attributes that differ from non-target areas (p. 14, l. 10–17; p. 14, l. 19 – p. 15, l. 9; p. 13, l. 17–19; p. 10, l. 23; p. 13, l. 17 – p. 14, l. 10); and

a video interface [FIG. 4; 418] to transmit data including said special window information [in 514 & 516] to said display [112] (p. 13, l. 15–17; p. 19, l. 16–18; p. 10, l. 23).

5. The apparatus [100] of claim 4, wherein (p. 10, l. 20 – p. 11, l. 9):

said third color signal [614] serves as a video clock signal for said special window information [in 514 & 516] (p. 17, l. 11–14; p. 19, l. 16–18).

6. The apparatus [100] of claim 5, further comprising (p. 10, l. 20 – p. 11, l. 9):

key signals [514, 516] including a pattern of bits of said special window information [in 514 & 516] to encode a target area position [716, 718], and corresponding to a pattern of pixels [612] depicted in said display [112] (p. 14, l. 17; p. 19, l. 16–18; p. 19, l. 13–14; p. 18, l. 21–22; p. 10, l. 23).

7. The apparatus [100] of claim 5, further comprising (p. 10, l. 20 – p. 11, l. 9):

pixel pairs [612] in said display [112], each member pixel of said pixel pairs [612] being proximately located, said pixel pairs [612] being colored according to said first color signal [616], said second color signal [618], and said third color signal [614] in an additively complementary manner to visually approximate a single pixel of a mixed color (p. 17, l. 5–6; p. 10, l. 23; p. 18, l. 1–19).

8. The apparatus [100] of claim 6, wherein components of said key signals [514, 516] include (p. 10, l. 20 – p. 11, l. 9; p. 14, l. 17):

a start sequence [712] indicating a beginning of said key signals [514, 516] (p. 19, l. 13; p. 14, l. 17);

a code sequence [714] distinguishing said key signals [514, 516] from said data (p. 19, l. 13; p. 14, l. 17);

a horizontal offset sequence [716] indicating a boundary of said target area [512] relative to a horizontal position of said key signals [514, 516] (p. 19, l. 13–14; p. 14, l. 10–17; p. 21, l. 6–21);

a vertical offset sequence [718] indicating a second boundary of said target area [512] relative to a vertical position of said key signals [514, 516] (p. 19, l. 14; p. 14, l. 10–17; p. 21, l. 22 – p. 22, l. 8);

a CRC checksum [720] verifying said horizontal offset sequence [716] and said vertical offset sequence [718] (p. 19, l. 14; p. 22, l. 17–19); and

a stop sequence [722] indicating an end of said key signals [514, 516] (p. 19, l. 15; p. 22, l. 19 – p. 23, l. 2).

9. The apparatus [100] of claim 8, further comprising (p. 10, l. 20 – p. 11, l. 9):

nondifferential key signal data [712, 722] indicating said start sequence [712] and said stop sequence [722] (p. 20, l. 3–5; p. 22, l. 19–22); and

differential key signal data [714, 716, 718, 720] indicating remaining components of said key signals [514, 516] (p. 20, l. 3–7; p. 22, l. 19 – p. 23, l. 1; p. 14, l. 17).

10. The apparatus [100] of claim 8, further comprising (p. 10, l. 20 – p. 11, l. 9):

a number sequence [514, 516] indicating a number of special windows [200] (p. 15, l. 15–19; p. 14, l. 12).

11. The apparatus [100] of claim 8, further comprising (p. 10, l. 20 – p. 11, l. 9):

a shape sequence [514, 516] indicating a shape of said target area [512] when said target area [512] is not rectangular (p. 15, l. 10–20; p. 14, l. 10–17).

12. The apparatus [100] of claim 8, further comprising (p. 10, l. 20 – p. 11, l. 9):

a selection sequence [514, 516] indicating a selection from among a plurality of available special processes (p. 15, l. 10–13).

Claims 13 – 20 [Withdrawn].

21. A method [FIG. 9] for generating an image [FIG. 2] on a display [112], wherein said image [FIG. 2] includes one or more special windows [200], comprising the steps of (p. 27, l. 9–10; p. 10, l. 20 – p. 11, l. 9; p. 11, l. 16–20; p. 14, l. 12):

embedding special window information [in 514 & 516] in a video signal [418] comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including said special window information [in 514 & 516], wherein said video signal [418] characterizes said image [FIG. 2] to be generated on said display [112] and said first and second color signals [616, 618] are used to display said special window information [in 514 & 516] on said display [112]

(p. 18, l. 19–23; p. 19, l. 16–18; p. 13, l. 15; p. 17, l. 9–11; p. 17, l. 18–19; p. 11, l. 16–20; p. 10, l. 23; p. 25, l. 1–16);

extracting [416] said special window information [in 514 & 516] from said video signal [418] (p. 19, l. 16–18; p. 19, l. 16–18; p. 13, l. 15); and

generating [416] a display control signal [420] in response to said window information to enable different processing of portions of said video signal [418] associated with said one or more special windows [200], wherein said different processing results in said one or more special windows [200] being produced on said display [112] with one or more display attributes differing from non-processed portions of said video signal [418] (p. 13, l. 17–19; p. 13, l. 15; p. 14, l. 12; p. 13, l. 17 – p. 14, l. 10).

22. The method [FIG. 9] of claim 21, wherein said step of embedding is performed by a window manager [314] that is included in an operating system [312] (p. 18, l. 19–23; p. 12, l. 17–18).

23. The method [FIG. 9] of claim 21, wherein said step of extracting [416] is performed by a window decoder [416] implemented as an application-specific integrated circuit (p. 19, l. 16–18; p. 23, l. 6–7).

24. The method [FIG. 9] of claim 21, further comprising the steps of:

specially processing a target area [512] in said special windows [200] in response to said display control signal [420], wherein said special processing results in said target

area [512] being produced on said display [112] with one or more display attributes that differ from non-target areas (p. 14, l. 10–17; p. 14, l. 19 – p. 15, l. 9; p. 13, l. 17–19; p. 10, l. 23; p. 13, l. 17 – p. 14, l. 10); and

transmitting [FIG. 4; 418] data including said special window information [in 514 & 516] to said display [112] using a video interface [FIG. 4; 418] (p. 13, l. 15–17; p. 19, l. 16–18; p. 10, l. 23).

25. The method [FIG. 9] of claim 24, further comprising the steps of:

depicting pixels [612] in said display [112] (p. 18, l. 19–22); and

using the third color signal [614] as a video clock signal for said special window information [in 514 & 516] (p. 17, l. 11–14; p. 19, l. 16–18).

26. The method [FIG. 9] of claim 25, further comprising the steps of:

transmitting [FIG. 4; 418] key signals [514, 516] including a pattern of bits of said special window information [in 514 & 516] to encode a target area position [716, 718] (p. 16, l. 7–11; p. 14, l. 17; p. 19, l. 16–18; p. 19, l. 13–14); and

corresponding to a pattern of said pixels [612] depicted in said display [112] (p. 18, l. 21–22; p. 10, l. 23).

27. The method [FIG. 9] of claim 25, further comprising the step of):

depicting pixel pairs [612] in said display [112], each member pixel of said pixel pairs [612] being proximately located, said pixel pairs [612] being colored according to said first color signal [616], said second color signal [618], and said third color signal [614] in an additively complementary manner to visually approximate a single pixel of a mixed color (p. 17, l. 5–6; p. 10, l. 23; p. 18, l. 1–19).

28. The method [FIG. 9] of claim 26, wherein said step of transmitting [FIG. 4; 418] said key signals [514, 516] further comprises the step of concurrently transmitting within said key signals [514, 516] (p. 16, l. 7–11; p. 14, l. 17):

a start sequence [712] indicating a beginning of said key signals [514, 516] (p. 19, l. 13; p. 14, l. 17);

a code sequence [714] distinguishing said key signals [514, 516] from said data (p. 19, l. 13; p. 14, l. 17);

a horizontal offset sequence [716] indicating a boundary of said target area [512] relative to a horizontal position of said key signals [514, 516] (p. 19, l. 13–14; p. 14, l. 10–17; p. 21, l. 6–21);

a vertical offset sequence [718] indicating a second boundary of said target area [512] relative to a vertical position of said key signals [514, 516] (p. 19, l. 14; p. 14, l. 10–17; p. 21, l. 22 – p. 22, l. 8);

a CRC checksum [720] verifying said horizontal offset sequence [716] and said vertical offset sequence [718] (p. 19, l. 14; p. 22, l. 17–19); and

a stop sequence [722] indicating an end of said key signals [514, 516] (p. 19, l. 15; p. 22, l. 19 – p. 23, l. 2).

29. The method [FIG. 9] of claim 28, further comprising the steps of:

transmitting [FIG. 4; 418] nondifferential key signal data [712, 722] indicating said start sequence [712] and said stop sequence [722] (p. 16, l. 7–11; p. 20, l. 3–5; p. 22, l. 19–22); and

transmitting [FIG. 4; 418] differential key signal data [714, 716, 718, 720] indicating remaining components of said key signals [514, 516] (p. 16, l. 7–11; p. 20, l. 3–7; p. 22, l. 19 – p. 23, l. 1; p. 14, l. 17).

30. The method [FIG. 9] of claim 28, further comprising the step of:

transmitting [FIG. 4; 418] a number sequence [514, 516] indicating a number of special windows [200] (p. 16, l. 7–11; p. 15, l. 15–19; p. 14, l. 12).

31. The method [FIG. 9] of claim 28, further comprising the step of:

transmitting [FIG. 4; 418] a shape sequence indicating s shape of said target area [512] when said target area [512] is not rectangular (p. 16, l. 7–11; p. 15, l. 10–20; p. 14, l. 10–17).

32. The method [FIG. 9] of claim 28, further comprising the step of:

transmitting [FIG. 4; 418] a selection sequence [514, 516] indicating a selection from among a plurality of available special processes (p. 16, l. 7–11; p. 15, l. 10–13).

Claims 33 – 40 [Withdrawn].

41. The method [FIG. 9] of claim 26, wherein said step of transmitting [FIG. 4; 418] said key signals [514, 516] further comprises the steps of (p. 16, l. 7–11; p. 14, l. 17):

transmitting [FIG. 4; 418] a start sequence [712] indicating a beginning of said key signals [514, 516] (p. 16, l. 7–11; p. 19, l. 13; p. 14, l. 17);

transmitting [FIG. 4; 418] a code sequence [714] distinguishing said key signals [514, 516] from said data (p. 16, l. 7–11; p. 19, l. 13; p. 14, l. 17);

transmitting [FIG. 4; 418] a horizontal offset sequence [716] indicating a boundary of said target area [512] relative to a horizontal position of said key signals [514, 516] (p. 16, l. 7–11; p. 19, l. 13–14; p. 14, l. 10–17; p. 21, l. 6–21);

transmitting [FIG. 4; 418] a vertical offset sequence [718] indicating a second boundary of said target area [512] relative to a vertical position of said key signals [514, 516] (p. 16, l. 7–11; p. 19, l. 14; p. 14, l. 10–17; p. 21, l. 22 – p. 22, l. 8);

transmitting [FIG. 4; 418] a CRC checksum [720] verifying said horizontal offset sequence [716] and said vertical offset sequence [718] (p. 16, l. 7–11; p. 19, l. 14; p. 22, l. 17–19); and

transmitting [FIG. 4; 418] a stop sequence [722] indicating an end of said key signals [514, 516] (p. 16, l. 7–11; p. 19, l. 15; p. 22, l. 19 – p. 23, l. 2).

42. A system [100] for generating an image [FIG. 2] on a display [112], wherein said image [FIG. 2] includes one or more special windows [200], comprising (p. 10, l. 20 – p. 11, l. 9; p. 11, l. 16–20; p. 14, l. 12):

means [314] for embedding special window information [in 514 & 516] in a video signal [418] comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including said special window information [in 514 & 516], wherein said video signal [418] characterizes said image [FIG. 2] to be generated on said display [112] and said first and second color signals [616, 618] are used to display said special window information [in 514 & 516] on said display [112] (p. 12, l. 17–18; p. 18, l. 19–23; p. 19, l. 16–18; p. 13, l. 15; p. 17, l. 9–11; p. 17, l. 18–19; p. 11, l. 16–20; p. 10, l. 23; p. 25, l. 1–16);

means [416] for extracting said special window information [in 514 & 516] from said video signal [418] (p. 13, l. 15; p. 19, l. 16–18; p. 13, l. 15); and

means [416] for generating a display control signal [420] in response to said window information to enable different processing of portions of said video signal [418] associated with said one or more special windows [200], wherein said different processing results in said one or more special windows [200] being produced on said display [112] with one or more display attributes differing from non-processed portions of said video signal [418] (p. 13, l. 15; p. 13, l. 15–19; p. 14, l. 12; p. 13, l. 17 – p. 14, l. 10).

43. A computer-readable medium [122] comprising program instructions [310] for generating an image [FIG. 2] comprised of one or more special windows [200] on a display [112] by performing the steps of (p. 12, l. 7–8; p. 10, l. 20 – p. 11, l. 9; p. 14, l. 12; p. 11, l. 16–20):

embedding a special window information [in 514 & 516] in a video signal [418] comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including said special window information [in 514 & 516], wherein said video signal [418] characterizes said image [FIG. 2] to be generated on said display [112] and said first and second color signals [616, 618] are used to display said special window information [in 514 & 516] on said display [112] (p. 18, l. 19–23; p. 19, l. 16–18; p. 13, l. 15; p. 17, l. 9–11; p. 17, l. 18–19; p. 11, l. 16–20; p. 10, l. 23; p. 25, l. 1–16);

extracting [416] said special window information [in 514 & 516] from said video signal [418] (p. 19, l. 16–18; p. 19, l. 16–18; p. 13, l. 15); and

generating [416] a display control signal [420] in response to said window information to enable special processing of portions of said video signal [418] associated

with said one or more special windows [200], wherein said special processing results in said one or more special windows [200] being produced on said display [112] with one or more display attributes that differ from non-processed portions of said video signal [418] (p. 13, l. 17–19; p. 13, l. 15; p. 14, l. 12; p. 13, l. 17 – p. 14, l. 10).

44. The apparatus [100] of claim 1, wherein the special window information [in 514 & 516] is embedded in the video signal [418] so as to be visually indistinctive to a viewer (p. 10, l. 20 – p. 11, l. 9; p. 19, l. 16–18; p. 13, l. 15; p. 15, l. 15–17).

45. The method [FIG. 9] of claim 21, wherein the special window information [in 514 & 516] is embedded in the video signal [418] so as to be visually indistinctive to a viewer (p. 19, l. 16–18; p. 13, l. 15; p. 15, l. 15–17).

46. The system [100] of claim 42, wherein the special window information [in 514 & 516] is embedded in the video signal [418] so as to be visually indistinctive to a viewer (p. 10, l. 20 – p. 11, l. 9; p. 19, l. 16–18; p. 13, l. 15; p. 15, l. 15–17).

47. The computer-readable medium of claim 43, wherein the special window information [in 514 & 516] is embedded in the video signal [418] so as to be visually indistinctive to a viewer (p. 10, l. 20 – p. 11, l. 9; p. 19, l. 16–18; p. 13, l. 15; p. 15, l. 15–17).

48. A method [FIG. 9] for displaying an image [FIG. 2] on a display [112], wherein said image [FIG. 2] includes one or more special windows [200], comprising the steps of (p. 27, l. 9–10; p. 10, l. 20 – p. 11, l. 9; p. 11, l. 16–20; p. 14, l. 12):

receiving [FIG. 4; 418] a video signal [418] that represents said image [FIG. 2] to be generated on said display [112], wherein said video signal [418] is comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including at least one key signal [514, 516] embedded therein (p. 13, l. 15–17; p. 19, l. 16–18; p. 10, l. 23; p. 17, l. 9–11; p. 17, l. 18–19; p. 14, l. 17; p. 18, l. 19–23);

extracting [416] said at least one key signal [514, 516] from said video signal [418] (p. 19, l. 16–18; p. 14, l. 17; p. 13, l. 15);

selectively generating [416] a display control signal [420] in response to said at least one key signal [514, 516], wherein said display control signal [420] indicates a target area [512] within said one or more special windows [200] is to be specially processed in order to display said target area [512] with one or more display attributes that differ from non-target areas (p. 13, l. 15–19; p. 14, l. 10–17; p. 14, l. 19 – p. 15, l. 9); and

generating an output signal [422] based on said video signal [418] and the presence or absence of said display control signal [420], wherein said output signal [422] produces said image [FIG. 2] including said one or more special windows [200] on said display [112] and said first and second color signals [616, 618] are used to display said at least one key signal [514, 516] to be displayed on said display [112] (p. 13, l. 19 – p. 14, l. 1; p. 14, l. 4–12; p. 10, l. 23; p. 25, l. 1–16).

49. The method [FIG. 9] of claim 48, further comprising the step of disabling special processing when a special window [200] is covered by another window (p. 14, l. 12; p. 26, l. 17–20).

50. An apparatus [100] for displaying an image [FIG. 2] on a display [112], wherein said image [FIG. 2] includes one or more special windows [200], comprising (p. 10, l. 20 – p. 11, l. 9; p. 11, l. 16–20; p. 14, l. 12):

means [FIG. 4; 418] for receiving a video signal [418] that represents said image [FIG. 2] to be generated on said display [112], wherein said video signal [418] is comprised of a first color signal [616], a second color signal [618], and a third color signal [614] with said first color signal [616] including at least one key signal [514, 516] embedded therein (p. 13, l. 15–17; p. 19, l. 16–18; p. 10, l. 23; p. 17, l. 9–11; p. 17, l. 18–19; p. 14, l. 17; p. 18, l. 19–23);

means [416] for extracting [said at least one key signal [514, 516] from said video signal [418] (p. 19, l. 16–18; p. 14, l. 17; p. 13, l. 15);

means [416] for selectively generating a display control signal [420] in response to said at least one key signal [514, 516], wherein said display control signal [420] indicates a target area [512] within said one or more special windows [200] is to be specially processed in order to display said target area [512] with one or more display attributes that differ from non-target areas (p. 13, l. 15–19; p. 14, l. 10–17; p. 14, l. 19 – p. 15, l. 9); and

means [414] for generating an output signal [422] based on said video signal [418] and the presence or absence of said display control signal [420], wherein said output signal [422] produces said image [FIG. 2] including said one or more special windows [200] on said display [112] and said first and second color signals [616, 618] are used to display said at least one key signal [514, 516] to be displayed on said display [112] (p. 13, l. 19 – p. 14, l. 1; p. 14, l. 4–12; p. 10, l. 23; p. 25, l. 1–16).

51. The apparatus [100] of claim 50, further comprising means [416] for disabling special processing when a special window [200] is covered by another window (p. 10, l. 20 – p. 11, l. 9; p. 26, l. 17–20; p. 14, l. 12).

(6) Grounds for Rejection to be reviewed on appeal

The Issue on Appeal:

Whether claims 1-12, 21-32, and 41-51 were properly rejected under 35 U.S.C. §102(e) as being anticipated by Masuda.

(7) Arguments

Claims 1-12, 21-32, and 41-51 are rejected under 35 U.S.C. §102(e) as being anticipated by Masuda et al. (U.S. Patent No. 5,978,041, hereinafter "Masuda").

Summary of Masuda:

Masuda provides an image display system that includes a display circuit that displays an image composed of a plurality of sub-images. An input circuit inputs a certain image signal. The certain image signal includes at least one sub-image embedded in the certain image signal that is provided by at least one of fields and frames, a designating circuit that designates timings of composition positions of the sub-image on scan lines of the certain image, and one control circuit that controls at least one of an amplitude level and a DC level of image signals corresponding to an area of the sub-image detected by the timing designated by the designating circuit.

Arguments:

Claims 1-12, 21-32, and 41-51 were improperly rejected under 35 U.S.C. §102(e) as being anticipated by Masuda.

Regarding claims 1-2, 21-22, 42, and 43, the Appellants respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 1, includes the limitation not disclosed in Masuda of:

> "a window manager to embed special window information in a video signal comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information, wherein said video signal characterizes said image to be generated on said display and said first and second color signals are used to display said special window information on said display; and
> a window decoder to extract said special window information from said video signal and responsively generate a display control signal, wherein said display control signal enables special processing of portions of said video signal associated with said one or more special windows, and wherein said special processing results in said one or more special windows being produced on said display with one or more display attributes that differ from non-processed portions of said video signal." [underlining for clarity]

The Examiner states in the Office Action dated April 25, 2006:

> "...a window manager to embed special window information in a video signal (e.g., figures 34-37; col. 34, lines 15-67), comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information (column 7, lines 5-15, level of brightness represent [sic] level of color);"
>
> wherein said video signal characterizes said image to be generated on said display (e.g., 31 of fig. 34); and said first and second color signals are used to display said special window information on said display (column 28, lines 6-10 and column 40, lines 44-63);
>
> and a window decoder to extract said special window information from said video signal and responsively generate a display control signal, wherein said display control signal enables special processing of portions of said video signal associated with said one or more special windows, and wherein said special processing results in said one or more special windows being produced on said display with one or more display attributes that differ from non-processed portions of said video signal (e.g., figures 33 and 37; col. 32, line 65 – col. 33, line 55 and col. 34, lines 35-67).

However, Masuda does not disclose embedding special window information in a video signal and then subsequently extracting that special window information from the video signal to generate a display control signal that is then used to enable special processing of portions of the video signal. Instead, Masuda processes the control information for the sub-images separately from the video signal and then merely transmits an image-only video signal that does not itself contain embedded special window information that can be extracted to generate a display control signal.

Thus, Masuda's figures 34-37 and column 34, lines 15-67, cited by the Examiner, do not teach the claimed limitations, but instead state:

> "As shown in FIG. 34, a data storage 331 may be used...and stores picture data equivalent to the pictures A and B.
>
> As shown in FIG. 35, a ROM 3205 for storing picture data...may be used...
>
> In the embodiment shown in FIG. 36, needless to say, three pictures of the pictures A, B, and C can be displayed in the picture display means 31 at the same time. An actual example of the specific area brightness conversion means 3102 in this case is shown in FIG. 37. Numerals 317i and 317j indicate data latches, 318i

> and 318j address decoders, 321a and 321b timing generators, 332 a change-over switch, 333 and 334 variable power sources, and 335 a decoder...
>
> In FIG. 37, the timing generator 321a generates a timing signal indicating the picture B display period of the picture display means 31 shown in FIG. 36 and the timing generator 321b generates a timing signal indicating the picture C display period. Output signals of these timing generators 321a and 321b are supplied to the change-over switch 332 via the decoder 335. When the timing generator 321a generates a timing signal, the change-over switch 332 is closed on the side of variable power source 333 and when the timing generator 321b generates a timing signal, the change-over switch 332 is closed on the side of variable power source 334. In other cases, the change-over switch 332 selects a voltage of 0.
>
> The voltage from the change-over switch 332 is added to the voltage of the variable power source 313 by the adder circuit 312 and supplied to the amplitude control means 310. The voltage of the variable power source 333 is set according to data of the data latch 317i and the voltage of the variable power source 334 is also set according to data of the data latch 317j.
>
> Therefore, by setting data of the data latches 317i and 317j suitably, the amplitudes of the pictures B and C can be set suitably.
>
> ...
>
> By doing this, only the brightness of a composite picture can be controlled independently. For example, when the picture A is a text screen and the picture B is a television screen, a bright and clear television screen and a readable text screen with a controlled brightness can be displayed at the same time." [deletions for clarity]

There is no mention of a display control signal in the video signal. There is no teaching or disclosure of embedding and then extracting a display control signal in the video signal and then using the extracted control signal to enable special processing of portions of the video signal, as claimed in the present invention.

Similarly, Masuda's column 7, lines 5-15, cited by the Examiner, does not teach the claimed limitations, but instead states:

> "By doing this, the brightness when the first and second objects mentioned above are accomplished can be adjusted and strengthened partially or for each scanning line.
>
> Still another object of the present invention is to provide a display device for handling video signals at scanning frequencies within an extremely wide range and displaying a satisfactory image even if a signal including a phase and frequency jitter is inputted. By doing this, an unstable input signal and a stable

> input signal are composed so as to obtain a stable image and the first to third objects mentioned above can be accomplished effectively."

Again, there is no mention of a display control signal in the video signal. Masuda's brightness control is accomplished by controls that are external to the video signal itself. No display control signal is embedded in the video signal and then extracted to enable special processing, as claimed in the present invention.

Similarly, Masuda's column 28, lines 6-10, and column 40, lines 44-63, further cited by the Examiner, do not teach the claimed limitations, but instead merely state:

> "Furthermore, in this embodiment, a constitution of only one channel of video circuit is described. However, in the case of a color display device, it is desirable to provide three channels of R. G, and B of video circuits having the aforementioned constitution." (column 28, lines 6-10)

> "By doing this, only the brightness level of the composition portion can be controlled.
>
> FIG. 55 is a block diagram showing an actual example of the picture display means 350 in the twenty-first embodiment of the...present invention. Numeral 3155 indicates a timing generator, 3216 a variable power source, and 3354 an input terminal...
>
> ...a signal supplied to the picture display means 350 from the interface 352 is coded data (composition position/brightness level data) for instructing the composition position of the picture B and the brightness level thereof. This composition position/brightness level data, as shown in FIG. 56, is the composition position data shown in FIG. 53 to which the brightness level data is added." (column 40, lines 44-63) [deletions for clarity]

Again, there is no mention of a display control signal in the video signal. Instead, Masuda's coded data is separately supplied to the picture display means. Brightness control is accomplished by controls that are external to the video signal itself. No display control signal is embedded in the video signal and then extracted to enable special processing, as claimed in the present invention.

Similarly, Masuda's figures 33 and 37; column 32, line 65 – column 33, line 55 and column 34, lines 35-67, further cited by the Examiner, do not teach the claimed limitations, but instead merely state:

"FIG. 33 is a block diagram showing an actual example of the specific area brightness conversion means 32...

In the drawing, this actual example comprises the amplitude control means 310 for controlling the amplitude of a picture signal, the DC level control means 311 for controlling the DC level of a picture signal, the adder 312, the variable power sources 313, 314, and 316, the change-over switch 315, the data latches 317a to 317c for setting the voltages of the variable power sources 313, 314, and 316, the address decoders 318a to 318c for latching data in the data latches 317a to 317c, and the timing generator 321 for generating a timing signal key for controlling switching of the changeover switch 315.

The timing generator 321 generates a timing signal key for specifying the composition position of the picture B in the picture A and comprises the counter circuits 319a to 319d for specifying the start addresses and end addresses of the picture B in the vertical and horizontal directions, the AND gates 320a to 320c, the data latches 317d to 317g for setting addresses in the counter circuits 319a to 319d respectively, and the address decoders 318d to 318g.

Data for deciding the DC level of a composite picture overall the screen which is to be supplied from the CPU circuit 34 via the signal bus 38 (FIG. 31) is stored in the data latch 317a, and data for deciding the amplitude overall the screen is stored in the data latch 317b, and data for deciding the amplitude of the composing portion (the portion of the picture B in this case) is stored in the data latch 317c, and the vertical start address of this composing portion is stored in the data latch 317d, and the vertical end address of this composing portion is stored in the data latch 317e, and the horizontal start address of this composing portion is stored in the data latch 317f, and the horizontal end address of this composing portion is stored in the data latch 317g.

In the vertical start counter 319a and the vertical end counter 319b, data in the data latch 317d and data in the data latch 317e are preset respectively by a vertical synchronizing signal Vsync and in the horizontal start counter 319c and the horizontal end counter 319d, data in the data latch 317f and data in the data latch 317g are preset respectively by a horizontal synchronizing signal Hsync. The vertical start counter 319a and the vertical end counter 319b set the horizontal synchronizing signal Hsync as a counter clock signal respectively and the horizontal start counter 319c and the horizontal end counter 319d set a dot clock signal DOTCK as a counter clock signal respectively. Outputs of the vertical start counter 319a and the vertical end counter 319b are ANDed by the AND gate 320a and outputs of the horizontal start counter 319c and the horizontal end counter 319d are ANDed by the AND gate 320b. Furthermore, outputs of these AND gates 320a and 320b are ANDed by the AND gate 320c and a timing signal key indicating the composition position of the picture B is obtained." (column 32, line 65 – column 33, line 55) [deletions for clarity]

(Figure 37 and column 34, lines 35-67 were quoted and discussed earlier above.)

Again, there is no mention of a display control signal in the video signal. Instead, Masuda's coded data is separately supplied to the picture display means. Brightness control is accomplished by controls that are external to the video signal itself. No display control signal is embedded in the video signal and then extracted to enable special processing, as claimed in the present invention.

Thus Masuda does not disclose embedding special window information in a video signal and then extracting that special window information from the video signal to generate a display control signal that is then used to enable special processing of portions of the video signal, as claimed in claims 1-12, 21-32, and 41-51.

In addition to the above, it is also noted that Masuda does not actually display the special window information of the present invention (first and second key signals 514 and 516, FIG. 5, of the present invention), as claimed in claims 1-12, 21-32, and 41-51, and as exemplified in claim 1:

> "...wherein...said first and second color signals are used to display said special window information on said display...

This can be readily determined from the quotes from Masuda above, in which it is clear that the special window information is not embedded within Masuda's video signal and therefore cannot be displayed according to the teachings and claims of the present invention.

Thus Masuda does not disclose embedding special window information in a video signal and then extracting that special window information from the video signal to generate a display control signal that is then used to enable special processing of portions of the video signal. Additionally, Masuda does not disclose actually displaying the special window information on the display.

Based on the above, it is respectfully submitted that independent claims claims 1, 21, 42, and 43, and the respective claims 2–12, 22–32, 41, and 44–47, depending therefrom, are allowable under 35 USC §102(e) because:

> "Anticipation requires the disclosure in a single prior art reference disclosure of each and every element of the claim under consideration." W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983) (citing Soundscriber Corp. v. United States, 360 F.2d 954, 960, 148 USPQ 298, 301 (Ct. Cl.), *adopted*, 149 USPQ 640 (Ct. Cl. 1966)), *cert. denied*, 469 U.S. 851 (1984). Carella v. Starlight Archery, 804 F.2d 135, 138, 231 USPQ 644, 646 (Fed. Cir.), *modified on reh'g*, 1 USPQ 2d 1209 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Reversal of the rejection is therefore respectfully requested.

Regarding claims 3 and 23, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 3 and 23 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 3, includes the limitation not disclosed in Masuda of:

"said window decoder is implemented as an application-specific integrated circuit."

The Examiner states in the Office Action:

> "...a window decoder implemented as an application-specific integrated circuit (e.g., figures 33 and 37; col. 32, line 65 – col. 33, line 55 and col. 34, lines 35-67)."

However, Masuda does not disclose an application-specific integrated circuit either in the portions cited by the Examiner (which were quoted and discussed earlier above) or elsewhere. It is therefore respectfully submitted that claims 3 and 23 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

Regarding claims 4 and 24, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 4 and 24 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 4, includes the limitation not disclosed in Masuda of:

> "a target area in said special windows to be specially processed in response to said display control signal...; and
> a video interface to transmit data including said special window information to said display." [underlining for clarity]

The Examiner states in the Office Action:

> "...a target area in said special windows to be specially processed in response to said display control signal...; and a video interface to transmit data including said special window information to said display (e.g., figures 33 and 37; col. 32, line 65 – col. 33, line 55 and col. 34, lines 35-67)."

However, those portions of Masuda cited by the Examiner have already been quoted and discussed above, and as discussed earlier, Masuda does not disclose such a display control signal, i.e., a display control signal that has been embedded in and then extracted from the video signal, and Masuda does not disclose transmitting that special window data to the display via the video interface. It is therefore respectfully submitted that claims 4 and 24 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 5 and 25, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 5 and 25 is therefore respectfully

requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 5, includes the limitation not disclosed in Masuda of:

> "said third color signal serves as a video clock signal for said special window information." [underlining for clarity]

The Examiner states in the Office Action:

> "...a third color signal serving as a video clock signal for said special window information (column 2, lines 37-52 and column 15, lines 5-19)."

However, Masuda does not disclose a third color signal that serves as a video clock signal for the special window information, but at column 2, lines 37-52 and column 15, lines 5-19 (cited by the Examiner) states:

> "The aforementioned scanning frequency of a video signal is increasing further at present and accordingly, the signal specification to which a display device corresponds is enlarged. Recently, a display device which can display not only the aforementioned computer signals but also video signals such as television (NTSC) signals and Hi-Vision signals has been required. Concretely, as to the horizontal scanning frequency of a video signal, a display device which can correspond to from 15.75 kHz of an NTSC signal to about 90 kHz equal to a high definition image or a signal of the CAD/CAM class (2M pixels) is desired.
>
> When an extremely wide range of frequencies is handled as mentioned above, it is considerably difficult for the conventional prior art to correspond to them. The reason is that to allow corresponding to the scanning frequency of a video signal, the complexity of switching control of the element constant of the deflection circuit and the number of parts increase and the circuit scale also increases so as to ensure the reliability of operation." (column 2, lines 37-55)

> "Numeral 413 indicates an input terminal of a vertical synchronizing signal, 48 an output horizontal synchronizing signal generator for dividing a dot clock generated by the dot clock generator circuit 47 and generating a horizontal synchronizing signal at a frequency which is two times of that of an inputted horizontal synchronizing signal, 49 a write control circuit for generating a sampling clock of the analog to digital circuit 42 and a write control signal of the line memory 43 on the basis of a horizontal synchronizing signal inputted from the horizontal synchronizing signal input terminal 46 and a dot clock generated by

> the dot clock generator circuit 47, and 410 a read control circuit for generating a clock of the digital to analog converter 44 and a read control signal of the line memory 43 on the basis of a horizontal synchronizing signal outputted from the output horizontal synchronizing signal generator 48 and a dot clock generated by the dot clock generator circuit 47." (column 15, lines 5-19)

Masuda thus merely describes synchronization in general and discloses nothing about specifically releasing two of the three color channels from the need to be clock-synchronized during the special window information interval, by relegating the video clock signal duty to only the remaining single third color signal. Masuda thus does not disclose a third color signal that serves as a video clock signal for the special window information as claimed in claims 5 and 25.

It is therefore respectfully submitted that claims 5 and 25 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 6 and 26, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 6 and 26 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 6, includes the limitation not disclosed in Masuda of:

> "key signals including a pattern of bits of said special window information to encode a target area position, and corresponding to a pattern of pixels depicted in said display." [underlining for clarity]

The Examiner states in the Office Action:

> "...key signals including a pattern of bits of said special window information to encode a target area position, and corresponding to a pattern of pixels depicted in said display (e.g., figures 33 and 37; col. 32, line 65 – col. 33, line 55 and col. 34, lines 35-67)."

However, those portions of Masuda cited by the Examiner have already been quoted and discussed above and similarly do not disclose distinct key signals that include special window information and in which those key signals correspond to a pattern of pixels that are actually depicted in the display. It is therefore respectfully submitted that claims 6 and 26 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 7 and 27, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 7 and 27 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 7, includes the limitation not disclosed in Masuda of:

> "pixel pairs in said display, each member pixel of said pixel pairs being proximately located, said pixel pairs being colored according to said first color signal, said second color signal, and said third color signal in an additively complementary manner to visually approximate a single pixel of a mixed color." [underlining for clarity]

The Examiner states in the Office Action:

> "...pixel pairs in said display each member pixel of said pixel pairs being proximately located (column 2, lines 37-50), said pixel pairs being colored according to said first color signal, said second color signal, and said third color signal in an additively complementary manner to visually approximate a single pixel of a mixed color (column 28-lines 6-36 and column 40, lines 43-63)."

However, Masuda does not disclose proximate pixel pairs that are treated together to approximate a single pixel. Instead, at column 2, lines 37-50, column 28, lines 6-36, and column 40, lines 43-63 (cited by the Examiner) Masuda states:

"The aforementioned scanning frequency of a video signal is increasing further at present and accordingly, the signal specification to which a display device corresponds is enlarged. Recently, a display device which can display not only the aforementioned computer signals but also video signals such as television (NTSC) signals and Hi-Vision signals has been required. Concretely, as to the horizontal scanning frequency of a video signal, a display device which can correspond to from 15.75 kHz of an NTSC signal to about 90 kHz equal to a high definition image or a signal of the CAD/CAM class (2M pixels) is desired.

When an extremely wide range of frequencies is handled as mentioned above, it is considerably difficult for the conventional prior art to correspond to them. The reason is that to allow corresponding to the scanning frequency of a video signal, the complexity of switching control of the element constant of the deflection circuit and the number of parts increase and the circuit scale also increases so as to ensure the reliability of operation." (column 2, lines 37-55)

"Furthermore, in this embodiment, a constitution of only one channel of video circuit is described. However, in the case of a color display device, it is desirable to provide three channels of R. G, and B of video circuits having the aforementioned constitution.

FIG. 27 is a block diagram showing the rough constitution of the display device in the tenth embodiment of the present invention. In this embodiment, the display device has a constitution in which the color temperature of an image can be changed when a video signal under various standards is inputted in addition to the characteristics of the display device in the ninth embodiment shown in FIG. 24.

In FIG. 27, numeral 15 indicates a scan converter, 13 a deflection circuit, 14 a cathode ray tube (CRT), 166 a video processor circuit, 170a, 170b, and 170c a video circuit (Rch), a video circuit (Gch), and a video circuit (Bch) respectively, 126 a variable gain video output circuit, 1103 an input video signal, 1203 an input synchronizing signal, 1303 an output synchronizing signal, 1403 an output video signal, 1503 a gain control signal, and 1603 a color temperature control signal.

The color temperature of a television (NTSC) signal is generally 6500 K (Kelvin) on the transmission side but it is changed to a suitable value (about 9300 K, etc.) on the receiver side. A high definition signal is standardized as 6500 K. A computer signal is not standardized but set to about 9300 K. The optimum color temperature varies with a video signal like this. When one display device displays video signals under various standards, it is desirable to display each video signal at a color temperature suited to the signal." (column 28, lines 6-36)

"By doing this, only the brightness level of the composition portion can be controlled.

FIG. 55 is a block diagram showing an actual example of the picture display means 350 in the twenty-first embodiment of the image display system

> and image display of the present invention. Numeral 3155 indicates a timing generator, 3216 a variable power source, and 3354 an input terminal and the same numeral is assigned to each of the parts corresponding to those shown in FIG. 52 so as to omit duplicated explanation.
>
> The whole constitution of this embodiment is also the same as that shown in FIG. 48. However, a signal supplied to the picture display means 350 from the interface 352 is coded data (composition position/brightness level data) for instructing the composition position of the picture B and the brightness level thereof. This composition position/brightness level data, as shown in FIG. 56, is the composition position data shown in FIG. 53 to which the brightness level data is added." (column 40, lines 43-63)

Masuda thus merely describes general brightness and color temperature controls. Masuda does not disclose pixel pairs arranged in an additively complementary manner to visually approximate a single pixel as claimed in claims 7 and 27.

It is therefore respectfully submitted that claims 7 and 27 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 8, 28, and 41, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 8, 28, and 41 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 8, includes the limitations not disclosed in Masuda of:

> "a code sequence distinguishing said key signals from said data;
> ...
> a CRC checksum verifying said horizontal offset sequence and said vertical offset sequence;"

The Examiner states in the Office Action:

> "...a code sequence distinguishing said key signals from said data;...a CRC checksum verifying said horizontal offset sequence and said vertical offset sequence;...(e.g., figures 53 and 56; col. 39, lines 49-60 and col. 40, line 54 – col. 41, line 3)."

However, Masuda does not disclose a code sequence that distinguishes the key signals from the data, and Masuda does not disclose a CRC checksum. Instead, at column 39, lines 49-60 and column 40, line 54 – column 41, line 3 (cited by the Examiner) Masuda merely states:

> "The whole constitution of this embodiment is also the same as that shown in FIG. 48. However, a signal supplied to the picture display means 350 from the interface 352 is data (composition position data) which is obtained by coding the composition position of the picture B. This composition position data, as shown in FIG. 53, is data indicating the start address and end address of the composition position, or data indicating the start address of the composition position and the horizontal and vertical widths of the composition position, or data indicating the end address of the composition position and the horizontal and vertical widths of the composition position." (column 39, lines 49-60)

> "The whole constitution of this embodiment is also the same as that shown in FIG. 48. However, a signal supplied to the picture display means 350 from the interface 352 is coded data (composition position/brightness level data) for instructing the composition position of the picture B and the brightness level thereof. This composition position/brightness level data, as shown in FIG. 56, is the composition position data shown in FIG. 53 to which the brightness level data is added.
>
> The timing generator 3155 comprises the circuit for generating a timing signal key for control of the changeover switch 3115 which is shown in FIG. 52 and a circuit for controlling the variable power source 3216 according to the brightness level data (FIG. 56). The circuit for controlling the variable power source 3216 may have, for example, the same constitution as that of the circuit for controlling the variable power sources 313, 314, and 316 shown in FIG. 33." (column 40, line 54 – column 41, line 3)

Masuda thus does not disclose a code sequence that distinguishes the key signals from the data, and Masuda does not disclose a CRC checksum, as claimed in claims 8, 28, and 41.

It is therefore respectfully submitted that claims 8, 28, and 41 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

Regarding claims 9 and 29, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 9 and 29 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 9, includes the limitations not disclosed in Masuda of:

> "nondifferential key signal data indicating said start sequence and said stop sequence; and differential key signal data indicating remaining components of said key signals."

The Examiner states in the Office Action:

> "...non-differential key signal data indicating said start sequence and said stop sequence; and differential key signal data indicating remaining components of said key signals (e.g., figures 53 and 56; col. 39, lines 49-60 and col. 40, line 54 – col. 41, line 3)."

However, those portions of Masuda cited by the Examiner have already been quoted and discussed immediately above and similarly do not disclose a configuration in which the start and stop sequences are distinguished from the remainder of the key signals by switching between non-differential key signal data and differential key signal data. It is therefore respectfully submitted that claims 9 and 29 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

Regarding claims 10 and 30, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim

non-obvious combinations thereof. Allowance of claims 10 and 30 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 10, includes the limitations not disclosed in Masuda of:

"a number sequence indicating a number of special windows."

The Examiner states in the Office Action:

> "...a number sequence indicating a number of special windows (e.g., figures 34-36, images (31))."

However, the portions of Masuda describing figures 34-36, cited by the Examiner, have already been quoted above in conjunction with claim 1 and similarly do not disclose a configuration that has a number sequence to indicate a number of special windows. It is therefore respectfully submitted that claims 10 and 30 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 11, 12, 31, and 32, these dependent claims each depend from respective independent claims 1 and 21 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 11, 12, 31, and 32 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 44-47, these dependent claims each depend from respective independent claims 1, 21, 42, and 43 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 44-47 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

The Appellants also respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 44, includes the limitations not disclosed in Masuda of:

> "the special window information is embedded in the video signal so as to be visually indistinctive to a viewer."

The Examiner states in the Office Action:

> "...the special window information is embedded in the video signal so as to be visually indistinctive to a viewer (e.g., figures 34-37; col. 34, lines 15-67)."

However, Masuda column 34, lines 15-67 (describing figures 34-37), cited by the Examiner, has already been quoted above in conjunction with claim 1 and similarly does not disclose special window information embedded in a video signal such that it is visually indistinctive to a viewer. In fact, it has been previously shown above that Masuda does not disclose embedding special window information in a video signal. It has also been shown that Masuda does not display such special window information. It therefore follows that Masuda does not disclose displaying special information embedded in a video signal in a visually indistinctive manner.

It is therefore respectfully submitted that claims 44-47 are allowable under 35 USC §102(e) because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra*.

Regarding claims 48 and 50, the Appellants respectfully traverse the rejection since the Appellants' claimed combination, as exemplified in claim 48, includes the limitations not disclosed in Masuda of:

> "receiving a video signal that represents said image to be generated on said display, wherein said video signal is comprised of a first color signal, a second color signal, and a third color signal with said first color signal including at least one key signal embedded therein;
>
> extracting said at least one key signal from said video signal;
>
> ...
>
> generating an output signal based on said video signal and the presence or absence of said display control signal, wherein said output signal produces said image including said one or more special windows on said display and said first and second color

signals are used to display said at least one key signal to be displayed on said display." [underlining for clarity]

The Examiner states in the Office Action:

"...receiving a video signal that represents said image to be generated on said display (e.g., figures 34-37; col. 34, lines 15-67), wherein said video signal is comprised of a first color signal, a second color signal, and a third color signal with said first color signal including at least one key signal embedded therein (column 7, lines 5-15, level of brightness represent level of color);

extracting said at least one key signal from said video signal;

...generating an output signal based on said video signal and the presence or absence of said display control signal, wherein said output signal produces said image including said one or more special windows on said display and said first and second color signals are used to display said at least one key signal to be displayed on said display (e.g., figures 33 and 37; col. 32, line 65 – col. 33, line 55 and col. 34, lines 35-67)."

However, these same issues have been discussed in detail above with respect to the rejection of claim 1, and those arguments are equally applicable to the rejection of claims 48 and 50, showing that Masuda does not disclose a key signal embedded in the video signal, Masuda does not disclose extracting the key signal from the video signal, and Masuda does not disclose displaying the key signal on the display, as claimed.

It is therefore respectfully submitted that independent claims 48 and 50, and the respective claims 49 and 51 depending therefrom, are allowable under 35 USC §102(e). Allowance of claims 48-51 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Regarding claims 49 and 51, these dependent claims each depend from respective independent claims 48 and 50 and are believed to be allowable since they contain all the limitations set forth in the independent claim from which they depend and additionally claim non-obvious combinations thereof. Allowance of claims 49 and 51 is therefore respectfully requested because of W.L. Gore & Assocs. v. Garlock, Inc. and the other cases cited therewith, *supra.*

Based on all of the above, it is respectfully submitted that claims 1-12, 21-32, and 41-51 are allowable under 35 U.S.C. §102(e) as being patentable over Masuda.

This rejection should accordingly be reversed.

(8) ***Claims Appendix***

See Appendix I

(9) ***Evidence appendix***

See Appendix II

(10) ***Related Proceedings Appendix***

See Appendix III

Conclusion and Relief Requested:

With respect to the issue presented in this appeal as set forth above in section (6), the Appellants hereby solicit a ruling that:

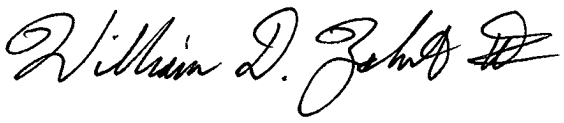
Claims 1-12, 21-32, and 41-51 were improperly rejected under 35 U.S.C. §102(e) as being anticipated by Masuda. This rejection should be reversed.

Claims 1-12, 21-32, and 41-51 are patentable over the prior art.

Reversal of the Examiner's decision is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including any extension of time fees, to Deposit Account No. 50-0374 and please credit any excess fees to such deposit account.

Respectfully submitted,



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APPENDICES follow on separate pages

(8) Claims appendix

Appendix I – Claims on Appeal

1. An apparatus for generating an image on a display, wherein said image includes one or more special windows, comprising:

a window manager to embed special window information in a video signal comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information, wherein said video signal characterizes said image to be generated on said display and said first and second color signals are used to display said special window information on said display; and

a window decoder to extract said special window information from said video signal and responsively generate a display control signal, wherein said display control signal enables special processing of portions of said video signal associated with said one or more special windows, and wherein said special processing results in said one or more special windows being produced on said display with one or more display attributes that differ from non-processed portions of said video signal.

2. The apparatus of claim 1, wherein said window manager is included in an operating system.

3. The apparatus of claim 1, wherein said window decoder is implemented as an application-specific integrated circuit.

4. The apparatus of claim 1, further comprising:

a target area in said special windows to be specially processed in response to said display control signal, wherein said special processing results in said target area being produced on said display with one or more display attributes that differ from non-target areas; and

a video interface to transmit data including said special window information to said display.

5. The apparatus of claim 4, wherein:

said third color signal serves as a video clock signal for said special window information.

6. The apparatus of claim 5, further comprising:

key signals including a pattern of bits of said special window information to encode a target area position, and corresponding to a pattern of pixels depicted in said display.

7. The apparatus of claim 5, further comprising:

pixel pairs in said display, each member pixel of said pixel pairs being proximately located, said pixel pairs being colored according to said first color signal,

said second color signal, and said third color signal in an additively complementary manner to visually approximate a single pixel of a mixed color.

8. The apparatus of claim 6, wherein components of said key signals include:

a start sequence indicating a beginning of said key signals;

a code sequence distinguishing said key signals from said data;

a horizontal offset sequence indicating a boundary of said target area relative to a horizontal position of said key signals;

a vertical offset sequence indicating a second boundary of said target area relative to a vertical position of said key signals;

a CRC checksum verifying said horizontal offset sequence and said vertical offset sequence; and

a stop sequence indicating an end of said key signals.

9. The apparatus of claim 8, further comprising:

nondifferential key signal data indicating said start sequence and said stop sequence; and

differential key signal data indicating remaining components of said key signals.

10. The apparatus of claim 8, further comprising:

a number sequence indicating a number of special windows.

11. The apparatus of claim 8, further comprising:

a shape sequence indicating a shape of said target area when said target area is not rectangular.

12. The apparatus of claim 8, further comprising:

a selection sequence indicating a selection from among a plurality of available special processes.

Claims 13 – 20 (Withdrawn).

21. A method for generating an image on a display, wherein said image includes one or more special windows, comprising the steps of:

embedding special window information in a video signal comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information, wherein said video signal characterizes said

image to be generated on said display and said first and second color signals are used to display said special window information on said display;

extracting said special window information from said video signal; and

generating a display control signal in response to said window information to enable different processing of portions of said video signal associated with said one or more special windows, wherein said different processing results in said one or more special windows being produced on said display with one or more display attributes differing from non-processed portions of said video signal.

22. The method of claim 21, wherein said step of embedding is performed by a window manager that is included in an operating system.

23. The method of claim 21, wherein said step of extracting is performed by a window decoder implemented as an application-specific integrated circuit.

24. The method of claim 21, further comprising the steps of:

specially processing a target area in said special windows in response to said display control signal, wherein said special processing results in said target area being produced on said display with one or more display attributes that differ from non-target areas; and

transmitting data including said special window information to said display using a video interface.

25. The method of claim 24, further comprising the steps of:

depicting pixels in said display; and

using the third color signal as a video clock signal for said special window information.

26. The method of claim 25, further comprising the steps of:

transmitting key signals including a pattern of bits of said special window information to encode a target area position, and

corresponding to a pattern of said pixels depicted in said display.

27. The method of claim 25, further comprising the step of:

depicting pixel pairs in said display, each member pixel of said pixel pairs being proximately located, said pixel pairs being colored according to said first color signal, said second color signal, and said third color signal in an additively complementary manner to visually approximate a single pixel of a mixed color.

28. The method of claim 26, wherein said step of transmitting said key signals further comprises the step of concurrently transmitting within said key signals:

a start sequence indicating a beginning of said key signals;

a code sequence distinguishing said key signals from said data;

a horizontal offset sequence indicating a boundary of said target area relative to a horizontal position of said key signals;

a vertical offset sequence indicating a second boundary of said target area relative to a vertical position of said key signals;

a CRC checksum verifying said horizontal offset sequence and said vertical offset sequence; and

a stop sequence indicating an end of said key signals.

29. The method of claim 28, further comprising the steps of:

transmitting nondifferential key signal data indicating said start sequence and said stop sequence; and

transmitting differential key signal data indicating remaining components of said key signals.

30. The method of claim 28, further comprising the step of:

transmitting a number sequence indicating a number of special windows.

31. The method of claim 28, further comprising the step of:

transmitting a shape sequence indicating s shape of said target area when said target area is not rectangular.

32. The method of claim 28, further comprising the step of:

transmitting a selection sequence indicating a selection from among a plurality of available special processes.

Claims 33 – 40 (Withdrawn).

41. The method of claim 26, wherein said step of transmitting said key signals further comprises the steps of:

transmitting a start sequence indicating a beginning of said key signals;

transmitting a code sequence distinguishing said key signals from said data;

transmitting a horizontal offset sequence indicating a boundary of said target area relative to a horizontal position of said key signals;

transmitting a vertical offset sequence indicating a second boundary of said target area relative to a vertical position of said key signals;

transmitting a CRC checksum verifying said horizontal offset sequence and said vertical offset sequence; and

transmitting a stop sequence indicating an end of said key signals.

42. A system for generating an image on a display, wherein said image includes one or more special windows, comprising:

means for embedding special window information in a video signal comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information, wherein said video signal characterizes said image to be generated on said display and said first and second color signals are used to display said special window information on said display;

means for extracting said special window information from said video signal; and

means for generating a display control signal in response to said window information to enable different processing of portions of said video signal associated with said one or more special windows, wherein said different processing results in said

one or more special windows being produced on said display with one or more display attributes differing from non-processed portions of said video signal.

43. A computer-readable medium comprising program instructions for generating an image comprised of one or more special windows on a display by performing the steps of:

embedding a special window information in a video signal comprised of a first color signal, a second color signal, and a third color signal with said first color signal including said special window information, wherein said video signal characterizes said image to be generated on said display and said first and second color signals are used to display said special window information on said display;

extracting said special window information from said video signal; and

generating a display control signal in response to said window information to enable special processing of portions of said video signal associated with said one or more special windows, wherein said special processing results in said one or more special windows being produced on said display with one or more display attributes that differ from non-processed portions of said video signal.

44. The apparatus of claim 1, wherein the special window information is embedded in the video signal so as to be visually indistinctive to a viewer.

45. The method of claim 21, wherein the special window information is embedded in the video signal so as to be visually indistinctive to a viewer.

46. The system of claim 42, wherein the special window information is embedded in the video signal so as to be visually indistinctive to a viewer.

47. The computer-readable medium of claim 43, wherein the special window information is embedded in the video signal so as to be visually indistinctive to a viewer.

48. A method for displaying an image on a display, wherein said image includes one or more special windows, comprising the steps of:

receiving a video signal that represents said image to be generated on said display, wherein said video signal is comprised of a first color signal, a second color signal, and a third color signal with said first color signal including at least one key signal embedded therein;

extracting said at least one key signal from said video signal;

selectively generating a display control signal in response to said at least one key signal, wherein said display control signal indicates a target area within said one or more special windows is to be specially processed in order to display said target area with one or more display attributes that differ from non-target areas; and

generating an output signal based on said video signal and the presence or absence of said display control signal, wherein said output signal produces said image including said one or more special windows on said display and said first and second color signals are used to display said at least one key signal to be displayed on said display.

49. The method of claim 48, further comprising the step of disabling special processing when a special window is covered by another window.

50. An apparatus for displaying an image on a display, wherein said image includes one or more special windows, comprising:

means for receiving a video signal that represents said image to be generated on said display, wherein said video signal is comprised of a first color signal, a second color signal, and a third color signal with said first color signal including at least one key signal embedded therein;

means for extracting said at least one key signal from said video signal;

means for selectively generating a display control signal in response to said at least one key signal, wherein said display control signal indicates a target area within said one or more special windows is to be specially processed in order to display said target area with one or more display attributes that differ from non-target areas; and

means for generating an output signal based on said video signal and the presence or absence of said display control signal, wherein said output signal produces

said image including said one or more special windows on said display and said first and second color signals are used to display said at least one key signal to be displayed on said display.

51. The apparatus of claim 50, further comprising means for disabling special processing when a special window is covered by another window.

(9) Evidence appendix

Appendix *II*

Evidence under 37 CFR 1.130, 1.131, or 1.132 entered by examiner and relied upon by appellant or any other evidence entered by the examiner and relied upon by appellant in the appeal, along with a statement setting forth where in the record that evidence was entered by the examiner

(37 CFR 41.37(c)(1)(ix)

None

(10) Related Proceedings appendix

APPENDIX III

Decisions rendered by a court or the Board identified in Related Appeals and Interferences section

(37 CFR 41.37(c)(1)(x)

Copies of the following decisions are herein enclosed:

None